

Brushless Motor Series DR-38312 Outer Rotor Type

0.6 kgf-cm
38 mm
2000 rpm
Constant speed
Integral drive



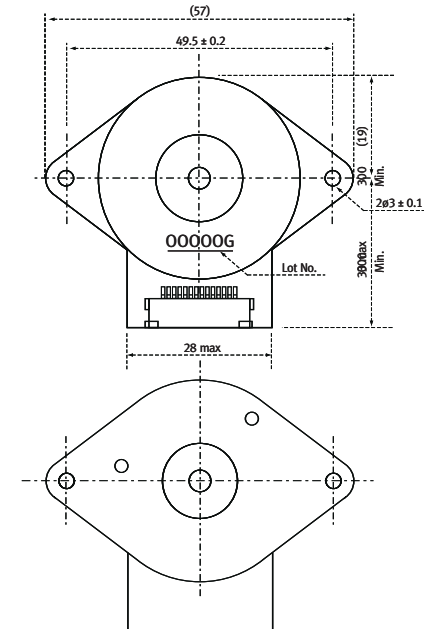
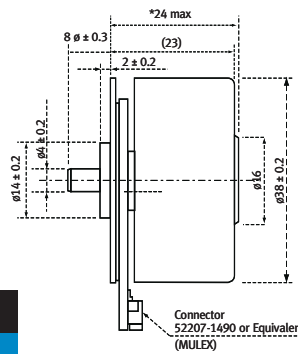
Specifications

ELECTRICAL CHARACTERISTICS		
RATED POWER	W	10
RATED VOLTAGE	VDC	24
RATED LOAD	N-cm	5.9
	kgf-cm	0.6
RATED SPEED	rpm	2000 $\pm 1\%$ (controlled)
RATED CURRENT	A (max.)	1A
??? BREAKDOWN TORQUE	N-cm (min)	127
	Kgf-cm (min)	1.8
NO LOAD SPEED	rpm	3300
LIFE	hours (typical)	10,000 (at rated load, voltage)
TEMPERATURE RISE	C (max.)	40 (at rated load, voltage)
CONNECTOR		
HEADER	-	FPC
ROTATION		
DIRECTION	CW/CCW	CW

RoHS compliant

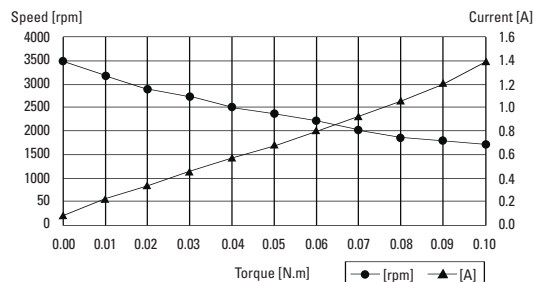
Connector Pin Assignment

Number	Function	Number	Function
1	C 3-	8	C 1-
2	C 3+	9	W 1
3	H bias +	10	W 1
4	H bias -	11	W 2
5	C 2+	12	W 2
6	C 2-	13	W 3
7	C 1+	14	W 3

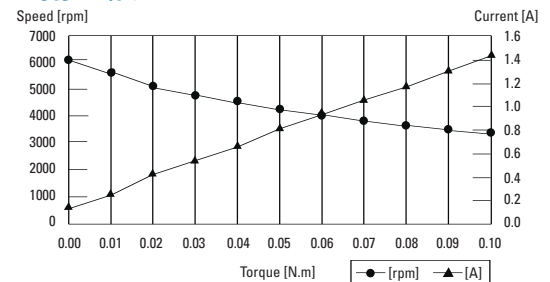


Speed-Torque Characteristics

DR-38312 24 ???V



DR-38312 48 V



Brushless Motor Series DR-5238-007 Outer Rotor Type



500 gf-cm
52mm
1000 rpm
Constant speed
Integral drive



Specifications

ELECTRICAL CHARACTERISTICS

RATED POWER	W	5.1
RATED VOLTAGE	VDC	24
RATED LOAD	N-cm	4.9
	gf-cm	500
RATED SPEED	rpm	1,000 $\pm 1\%$ (controlled)
RATED CURRENT	mA (max.)	750
BREAKDOWN TORQUE	gf-cm (min.)	550 (at 21.6 V)
NO LOAD SPEED	rpm	1,000
LIFE	hours (typical)	10,000 (at rated load, voltage)
ACOUSTIC NOISE	dB(A)	50 (at distance of 1 m)
TEMPERATURE RISE	C (max.)	50 (at rated load, voltage)

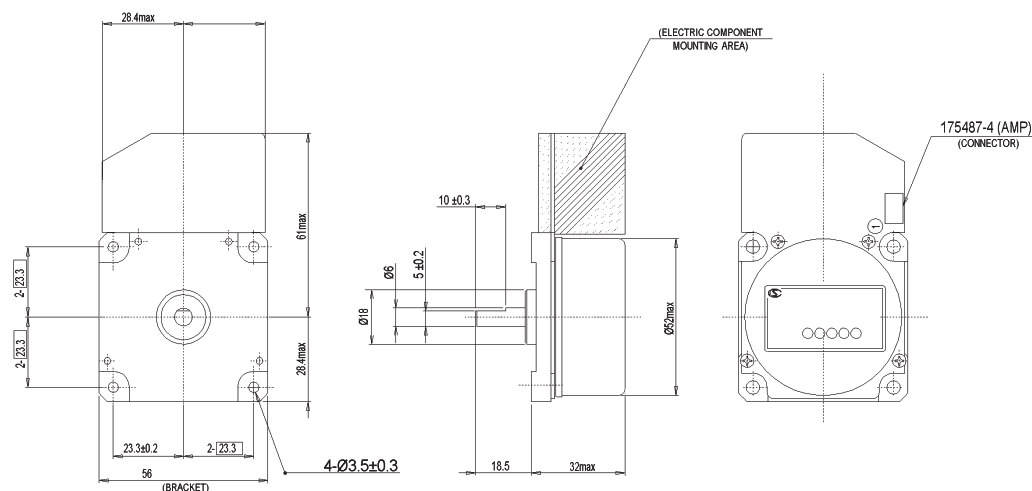
CONNECTOR

HEADER	-	AMP p/n 175487-4 (white)
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ROTATION

DIRECTION	CCW	(facing at shaft)
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RoHS compliant

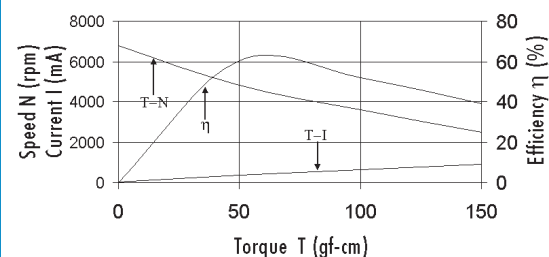


Connector Pin Assignment

Number	Function
1	VDC: 24 V
2	GND
3	On/Off (Low Start)
4	Lock Signal: Open Collector

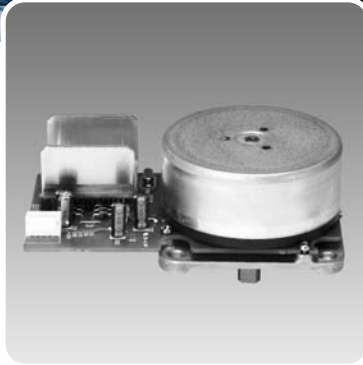
Speed-Torque Characteristics

DR-5238-007



Brushless Motor Series DR-6236-152 Outer Rotor Type

1 kgf-cm
62mm
1500 rpm
Constant speed
Integral drive



Specifications

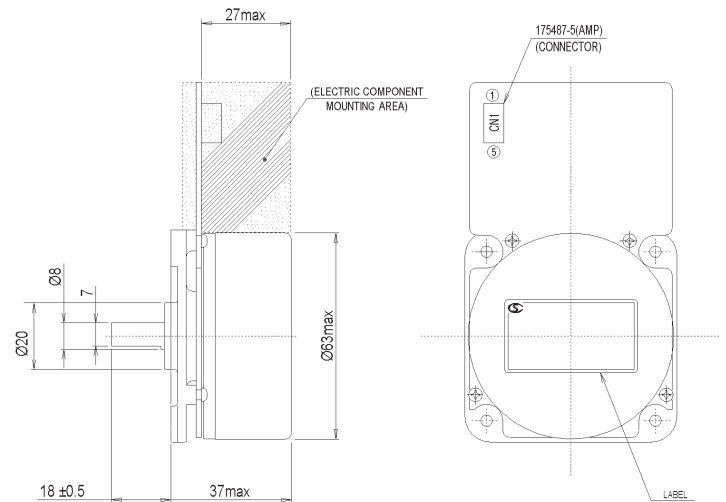
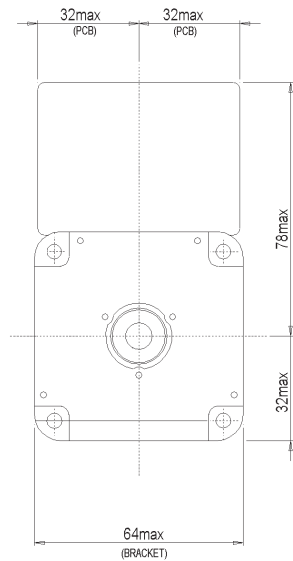
ELECTRICAL CHARACTERISTICS

RATED POWER	W	15
RATED VOLTAGE	VDC	24
RATED LOAD	N-cm	9.8
	kgf-cm	1
RATED SPEED	rpm	1,500 $\pm 1\%$ (controlled)
RATED CURRENT	A (max.)	1.4
BREAKDOWN TORQUE	N-cm (min.)	9.3 (at 21.6 V)
	gf-cm (min.)	950 (at 21.6 V)
NO LOAD SPEED	rpm	1,500
LIFE	hours (typical)	10,000 (at rated load, voltage)
ACOUSTIC NOISE	dB(A)	45 (at distance of 1 m)
TEMPERATURE RISE	C (max.)	65 (at rated load, voltage)

CONNECTOR

HEADER	-	AMP p/n 175487-4 (white)
ROTATION		
DIRECTION	CCW	(facing at shaft)

RoHS compliant

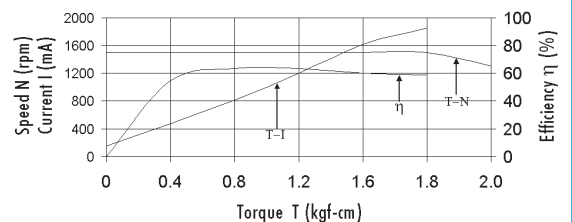


Connector Pin Assignment

Number	Function
1	VDC: 24 V
2	GND
3	On/Off (Low Start)
4	Lock Signal: Open Collector

Speed-Torque Characteristics

DR-6236-152



Brushless Motor Series DR-8738-252 Outer Rotor Type

3.5 kgf-cm
87mm
1500 rpm
Constant speed
Integral drive



Specifications

ELECTRICAL CHARACTERISTICS

RATED VOLTAGE	VDC	24
VCC	VDC	5
RATED LOAD	N-m	0.343
	kgf-cm	3.5
RATED SPEED	rpm	1,500 ± 0.1% (controlled)
RATED CURRENT	A (max.)	5.0
BREAKDOWN TORQUE	N-cm (min.)	0.39 (at 21.6 V)
	kgf-cm (min.)	4.0 (at 21.6 V)
NO LOAD SPEED	rpm	1,500
LIFE	hours (typical)	10,000 (at rated voltage, rated load)
ACOUSTIC NOISE	dB(A) (max.)	45 (at distance of 1 m)
TEMPERATURE RISE	C (max.)	75 (at rated load, rated voltage)

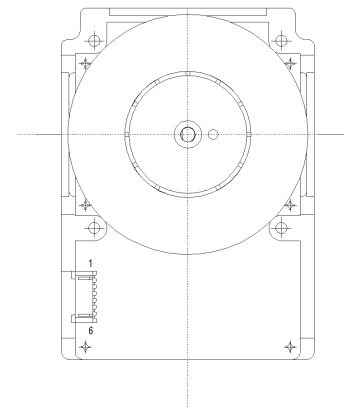
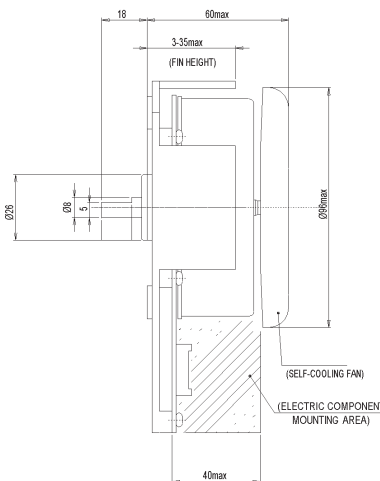
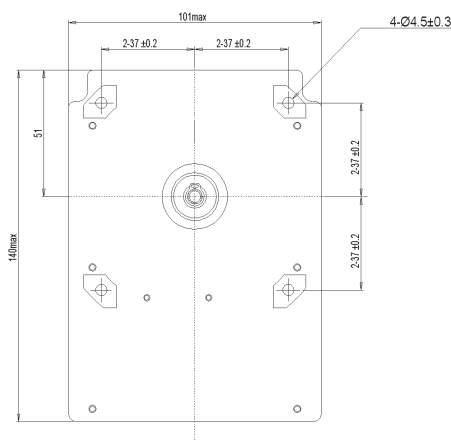
CONNECTOR

HEADER - AMP p/n 53053-0610 (white)

ROTATION

DIRECTION CW/CCW CW (facing at shaft)

RoHS compliant

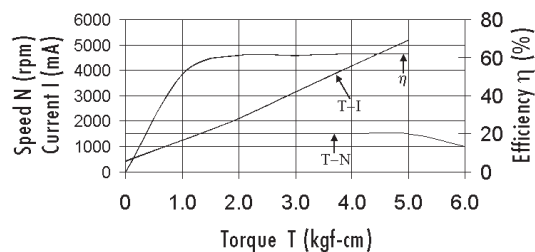


Connector Pin Assignment

Number	Function
1	VDC: 24 V (coil)
2	GND (VDC)
3	GND (VCC)
4	VCC: 5 V (logic)
5	On/Off (Low Start)
6	Lock Signal: Open Collector

Speed-Torque Characteristics

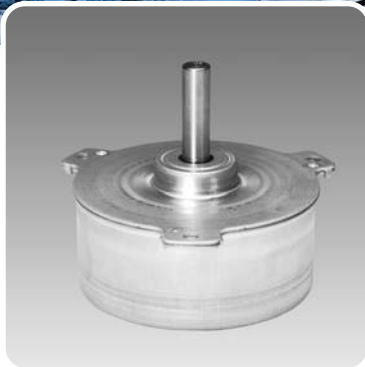
DR-8738-252



Brushless Motor Series DR-6634-514 Inner Rotor Type



110 gf-cm
66 mm
3200 rpm
Variable speed
Integral drive



Specifications

ELECTRICAL CHARACTERISTICS

RATED VOLTAGE	VDC	7 to 40 (operating range)
VCC	VDC	12 ± 1.2 (logic level)
RATED LOAD	gf-cm	110
RATED SPEED	rpm	3,200 ± 320 (at 26.5 V)
RATED CURRENT	A (max.)	0.35 (at 26.5 V)
NO LOAD SPEED	rpm	3,850 (nominal)
LIFE	hours (typical)	10,000 (at less than 45 C ambient)

ENCODER

TYPE	-	magnetic encoder
RESOLUTION	pulse/rev.	2
OUTPUT LEVEL	V (high)	11.0 ± 1.0
	V (low)	0 to 0.5
DUTY CYCLE	%	66.7 ± 20
WINDING RESISTANCE	Ω	5.4 (nominal)

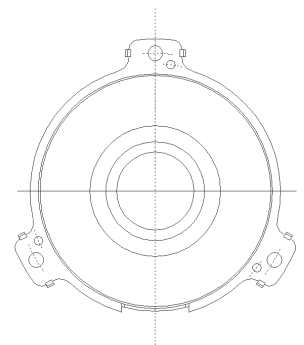
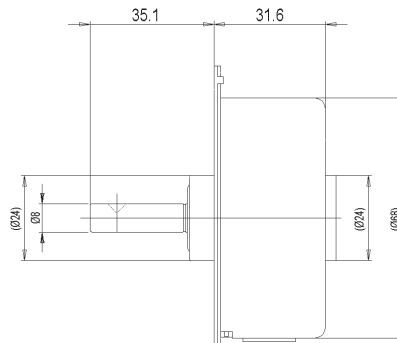
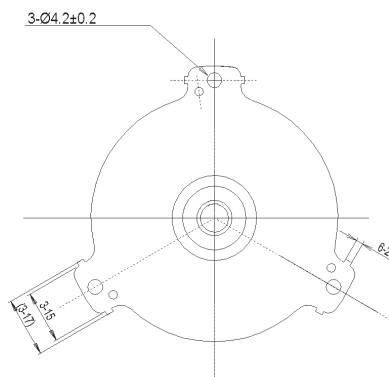
CONNECTOR

	-	JST p/n S4B-EH
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ROTATION

DIRECTION	CCW	(facing at shaft)
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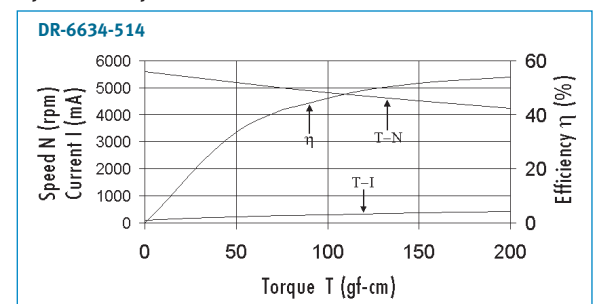
RoHS compliant



Connector Pin Assignment

Number	Function
1	Encoder Out
2	VCC: 12 V
3	GND
4	VDC: 7 to 40 V

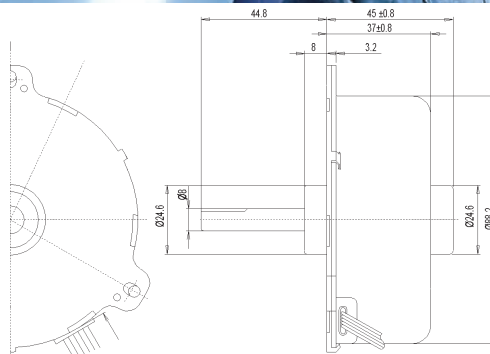
Speed-Torque Characteristics



Brushless Motor Series DR-8538-555 / 888 Inner Rotor Type



1400 gf-cm
85 mm
2700 rpm
Variable speed
Integral drive



Specifications

ELECTRICAL CHARACTERISTICS		DR-8538-555	DR-8538-888
RATED VOLTAGE	VDC	10 to 40 (operating range)	90 to 178 (operating voltage)
VCC	VDC	12 ± 1.2 (logic level)	15 ± 1.5 (logic level)
RATED LOAD	gf-cm	1,200	1,400
RATED SPEED	rpm	2,000 ± 250 (at 34 V)	2,700 ± 300 (at 160 V)
RATED CURRENT	A (max.)	1.4 (at 34 V)	0.44 (at 160 V)
SPEED CONTROL INPUT	V	-	0 to 6.5
NO LOAD SPEED	rpm	3,000 (nominal)	4,000 (nominal)
NO LOAD CURRENT	mA	200 (nominal)	50 (nominal)
TORQUE CONSTANT	g-cm/A	1,250	4,550 (nominal)
LIFE	hours (min.)	10,000 (at less than 45 C ambient)	10,000 (at less than 45 C ambient)

ENCODER		DR-8538-555	DR-8538-888
TYPE	-	magnetic encoder	magnetic encoder
RESOLUTION	pulse/rev.	4	12
OUTPUT LEVEL	V (high)	11.0 ± 1.0	4.0 ± 1.0
	V (low)	0 to 0.5	0 to 1.0
DUTY CYCLE	%	66.7 ± 20	50 ± 20

CONNECTOR		DR-8538-555	DR-8538-888
NONE	-	(flying wires)	(flying wires)
LEAD WIRE	-	UL1430, AWG #22	UL1430, AWG #22

ROTATION		DR-8538-555	DR-8538-888
DIRECTION	CCW	(facing at shaft)	(facing at shaft)

RoHS compliant

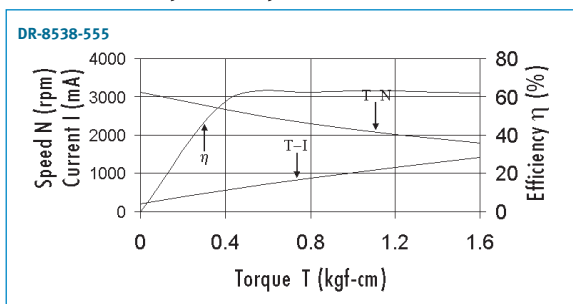
DR-8538-555 Connector Pin Assignment

Number	Function
1	VDC: 24 V
2	GND
3	On/Off (Low Start)
4	Lock Signal: Open Collector

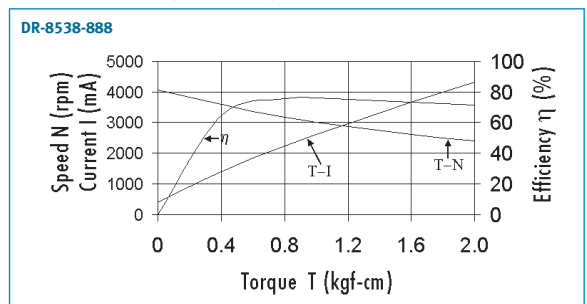
DR-8538-888 Connector Pin Assignment

Number	Function
1	VDC: 24 V
2	GND
3	On/Off (Low Start)
4	Lock Signal: Open Collector

DR-8538-555 Speed-Torque Characteristics



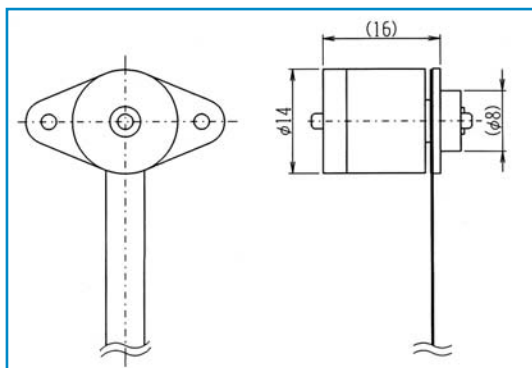
DR-8538-888 Speed-Torque Characteristics



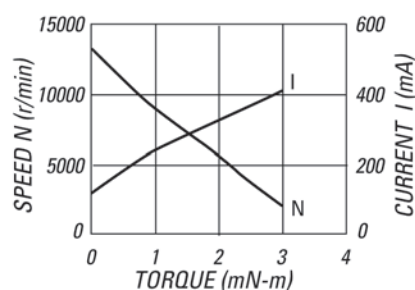
Brushless Motor Series Outer Rotor Type



DR-14312



Speed-Torque Characteristics

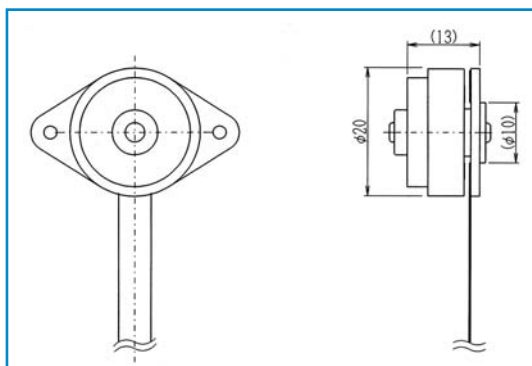


Specifications

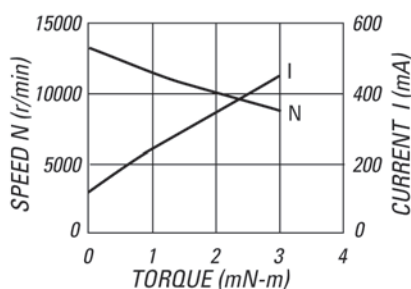
ELECTRICAL CHARACTERISTICS

RATED VOLTAGE	DCV	12
RATED TORQUE	mNm	0.5
RATED SPEED	rpm	11000
RATED CURRENT	A	0.18

DR-20312



Speed-Torque Characteristics

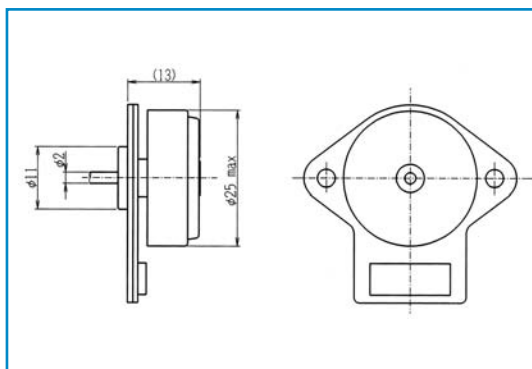


Specifications

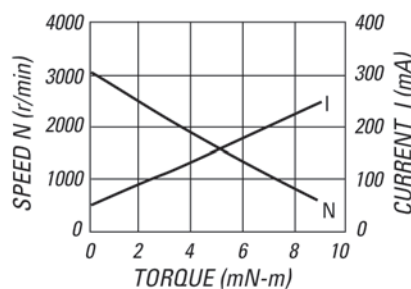
ELECTRICAL CHARACTERISTICS

RATED VOLTAGE	DCV	12
RATED TORQUE	mNm	1
RATED SPEED	rpm	12000
RATED CURRENT	A	0.25

DR-24312



Speed-Torque Characteristics



Specifications

ELECTRICAL CHARACTERISTICS

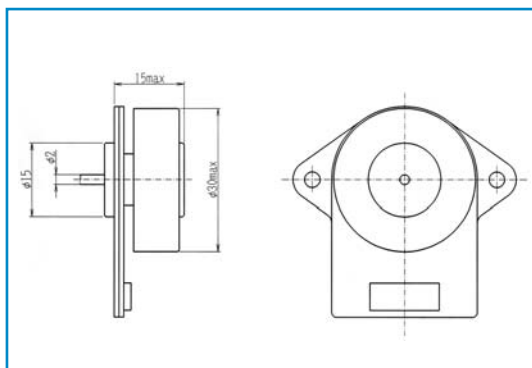
RATED VOLTAGE	DCV	12
RATED TORQUE	mNm	3
RATED SPEED	rpm	22000
RATED CURRENT	A	0.11

All models on this page are RoHS compliant

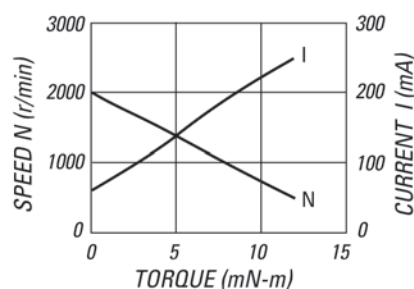
Brushless Motor Series Outer Rotor Type



DR-29312



Speed-Torque Characteristics

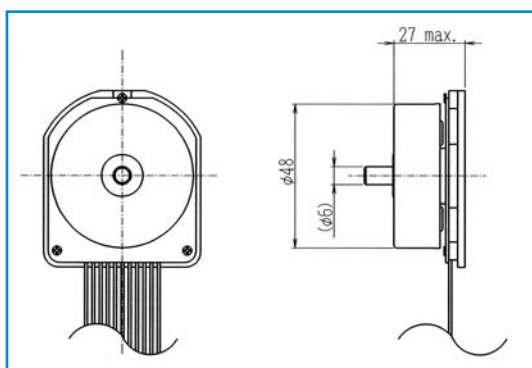


Specifications

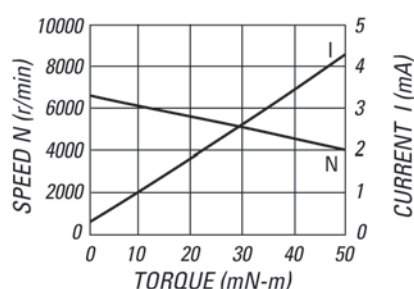
ELECTRICAL CHARACTERISTICS

RATED VOLTAGE	DCV	12
RATED TORQUE	mNm	6
RATED SPEED	rpm	1400
RATED CURRENT	A	0.16

DR-4734



Speed-Torque Characteristics

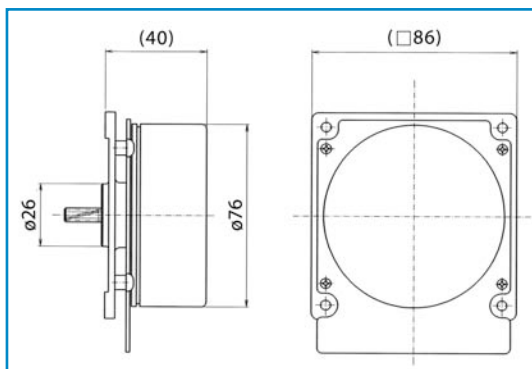


Specifications

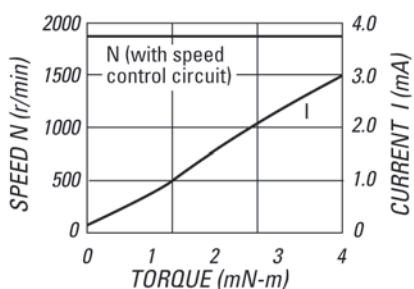
ELECTRICAL CHARACTERISTICS

RATED VOLTAGE	DCV	12
RATED TORQUE	mNm	23
RATED SPEED	rpm	5700
RATED CURRENT	A	1.8

DR-7638



Speed-Torque Characteristics



Specifications

ELECTRICAL CHARACTERISTICS

RATED VOLTAGE	DCV	24
RATED TORQUE	mNm	220
RATED SPEED	rpm	1800
RATED CURRENT	A	3.0

All models on this page are RoHS compliant